

**IN THE CLAIMS**

Please amend the claims to read as indicated herein.

1. (currently amended) A method of monitoring an ISDN link, comprising the steps of:  
monitoring an ISDN link using a passive probe connected to said ISDN link via a network  
tap at a first location to monitor subscriber signalling messages on an ISDN D  
channel to derive first monitoring data;  
monitoring at said first location, using said passive probe, telecommunications traffic  
traversing ISDN B channels associated with said ISDN D channel to derive second  
monitoring data; and  
correlating said first and second monitoring data by selecting some of said second  
monitoring data in accordance with said first monitoring data, and taking a  
predetermined action in accordance with said selected second monitoring data.
2. (previously presented) A method according to claim 1, including the steps of:  
monitoring additional signalling messages on a signalling link in a telecommunications  
network coupled to said ISDN link, to derive third monitoring data; and  
correlating said third monitoring data with at least one of said first and second monitoring  
data.
3. (previously presented) A method according to claim 1, including the steps of:  
monitoring at a second location subscriber signalling messages on an ISDN D channel to  
derive additional monitoring data;  
monitoring at said second location telecommunications traffic traversing ISDN B channels  
associated with said ISDN D channel to derive further monitoring data; and  
correlating said additional and further monitoring data with said first and second  
monitoring data.
4. (currently amended) A method of monitoring an ISDN link, comprising the steps of:

monitoring an ISDN link using a passive probe connected to said ISDN link via a network tap to monitor subscriber signalling messages on an ISDN D channel to derive first monitoring data;

monitoring additional signalling messages on a signalling link in a telecommunications network coupled to said ISDN link, to derive second monitoring data; and

correlating said first and second monitoring data.

5. (currently amended) An apparatus for monitoring an ISDN link, comprising:

first equipment for monitoring an ISDN link using a passive probe connected to said ISDN link via a network tap at a first location for monitoring subscriber signalling messages on an ISDN D channel to derive first monitoring data;

second equipment at said first location for monitoring, using said passive probe, telecommunications traffic traversing ISDN B channels associated with said ISDN D channel to derive second monitoring data; and

correlation apparatus coupled to said first and second equipment to receive and correlate said first and second monitoring data by selecting some of said second monitoring data in accordance with said first monitoring data, and taking a predetermined action in accordance with said selected second monitoring data.

6. (currently amended) An apparatus for monitoring an ISDN link, comprising:

first equipment for monitoring an ISDN link using a passive probe connected to said ISDN link via a network tap for monitoring subscriber signalling messages on an ISDN D channel to derive first monitoring data;

second equipment for monitoring additional signalling messages on a signalling link in a telecommunications network coupled to said ISDN link, to derive second monitoring data; and

correlation apparatus coupled to said first and second equipment to receive and correlate said first and second monitoring data.

7. (currently amended) A method of monitoring a telecommunications system having transmission channels and an associated signalling channel, comprising the steps of:

monitoring, via a network tap at a first location, signalling messages on the signalling channel to derive first monitoring data;  
selecting a transmission channel identified by reference to information contained in said first monitoring data;  
monitoring, via said network tap at said first location, telecommunications traffic traversing the selected transmission channel to derive second monitoring data; and  
extracting information that is traversing the selected transmission channel by reference to information contained in said second monitoring data.

8. (original) The method of claim 7, wherein the transmission channel is an ISDN B channel and the signalling channel is an ISDN D channel.

9. (previously presented) The method of claim 7, wherein the transmission channel is carried by a telephone transmission link and the signalling channel is carried by a common channel signalling link.

10. (previously presented) The method of claim 7, wherein said extracted information comprises dual-tone multi-frequency (DTMF) signals.

11. (canceled)

12. (previously presented) The method of claim 1, wherein correlation of data is performed to provide service records.

13. (previously presented) The method of claim 12, wherein said service records include data derived from an ISDN B channel.

14. (canceled)

15. (canceled)

16. (canceled)

17. (previously presented) The method of claim 7, wherein monitoring for at least one location is passive in nature.

18. (previously presented) The method of claim 4, wherein correlation of data is performed to provide service records.

19. (previously presented) The method of claim 5, wherein correlation of data is performed to provide service records.

20. (previously presented) The method of claim 6, wherein correlation of data is performed to provide service records.

21. (previously presented) The method of claim 7, further comprising, correlating said first monitoring data and said second monitoring data to provide service records.

22. (previously presented) The method of claim 1, wherein said predetermined action comprises providing an update in real time of summary information regarding operation of said ISDN link.

23. (previously presented) The method of claim 1, wherein said predetermined action comprises analysing said selected second monitoring data to identify a type of service being carried on the ISDN B channel from which said selected second monitoring data are derived.

24. (previously presented) The method of claim 23, wherein a spectrum of said selected second monitoring data is analysed to identify whether said type of service is a voice call, a fax call or a data call.

25. (previously presented) The method of claim 2, wherein said signalling link is an SS7 signalling link, and said additional signalling messages are SS7 protocol messages.

26. (previously presented) The method of claim 4, wherein said signalling link is an SS7 signalling link, and said additional signalling messages are SS7 protocol messages.

27. (previously presented) The apparatus of claim 5, wherein said predetermined action comprises providing an update in real time of summary information regarding operation of said ISDN link.

28. (previously presented) The apparatus of claim 5, wherein said predetermined action comprises analysing said selected second monitoring data to identify a type of service being carried on the ISDN B channel from which said selected second monitoring data are derived..

29. (previously presented) The apparatus of claim 28, wherein a spectrum of said selected second monitoring data is analysed to identify whether said type of service is a voice call, a fax call or a data call.

30. (previously presented) The apparatus of claim 6, wherein said signalling link is an SS7 signalling link, and said additional signalling messages are SS7 protocol messages.

31. (previously presented) The method of claim 1, wherein said first monitoring data are derived from a plurality of D channels.

32. (previously presented) The method of claim 7, wherein said transmission and signalling channels are carried on an Asynchronous Transfer Mode system.

33. (currently amended) A method of assembling service detail records for transactions carried over an ISDN link, comprising the steps of:

monitoring, via a network tap, subscriber signalling messages on an ISDN D channel in an ISDN link;  
selecting D channel signalling messages relating to a transaction carried over said ISDN link in accordance with a predetermined criterion; and  
assembling a service detail record for said transaction from said selected D channel signalling messages.

34. (currently amended) An apparatus for assembling service detail records for transactions carried over an ISDN link, comprising:

- a network tap for monitoring subscriber signalling messages on an ISDN D channel in an ISDN link;
- means for selecting D channel signalling messages relating to a transaction carried over said ISDN link in accordance with a predetermined criterion; and
- means for assembling a service detail record for said transaction from said selected D channel signalling messages.

Please add the following claims, newly numbered as claims 35 – 42.

- 35. (new) The method of claim 1, wherein the tap is coupled to the link.
- 36. (new) The method of claim 1, wherein the tap is located between network elements.
- 37. (new) The method of claim 1, wherein the tap is coupled to a link between network elements.
- 38. (new) The method of claim 1, wherein the tap is physically inserted into a link.
- 39. (new) The method of claim 1, wherein the tap is coupled to a trunk.
- 40. (new) The method of claim 1, wherein a location of the tap within a network is selectable.
- 41. (new) The method of claim 1, wherein a location of a tap within a network is selectable independently of a network element.
- 42. (new) The method of claim 1, wherein location of the tap is independent of a network element.